

# APPARATUS AND METHOD FOR IMPLEMENTING RAID DEVICES IN A CLUSTER COMPUTER SYSTEM

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## ABSTRACT OF THE DISCLOSURE

9 Apparatus and methods for efficiently implementing logical-  
device reservations in a cluster computer system. The apparatus includes  
cooperating controllers programmed in firmware around a distributed  
reservation table. The apparatus manages access to a logical device,  
with first and second nodes with respective bus controllers  
communicatively coupled to each other and to a logical device by means of  
a bus. The first controller receives a request to reserve the logical  
device and, in response, communicates a reservation request for the  
logical device over the bus to the second controller for execution by the  
second controller. In response to the communicated reservation request,  
the second controller reserves the logical device for the first node.  
The logical device may be a logical unit depending from a multi-logical-  
unit controller. The apparatus further manages access by the first  
controller's receiving a request to release the logical device and  
responsively communicating a release request over the bus to the second  
controller for execution by the second controller. The second controller  
responsively releases the logical device within itself.